IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A method of forming a conductor comprising:

depositing an insulator over a planarized surface;

etching a trench having a depth on the insulator;

depositing a barrier layer on the insulator;

depositing a seed layer directly on the barrier layer;

removing the barrier layer and seed layer from selected areas of the insulator, leaving a seed area; and

depositing a conductor on the seed area by a selective deposition process after removing the barrier layer and seed layer from selected areas of the insulator.

2. (Original) The method of claim 1, wherein depositing the barrier layer on the insulator comprises:

depositing the barrier layer on the insulator by physical vapor-deposition.

3. (Original) The method of claim 1, wherein etching a trench on the insulator comprises:

etching the trench to a depth of about equal to the depth of the insulator.

4. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer on the oxide layer;

depositing a seed layer on the barrier layer without a layer between the seed layer and the barrier layer;

removing the barrier layer and seed layer from unused areas of the oxide layer, leaving a seed area; and

depositing a conductor on the seed area after removing the barrier layer and seed layer from unused areas of the oxide layer.

5. (Original) The method of claim 4, wherein depositing an oxide layer over a planarized surface comprises:

depositing a silicon dioxide layer over the planarized surface.

6. (Original) The method of claim 4, wherein depositing an oxide layer over a planarized surface comprises:

depositing a fluorinated silicon oxide layer over the planarized surface.

7. (Original) The method of claim 4, wherein depositing a seed layer on the barrier layer comprises:

depositing the seed layer on the barrier layer by physical vapor-deposition.

8-11. (Canceled)

12. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer of tantalum on the oxide layer;

depositing a seed layer selected from the group consisting of gold, silver, and copper on the oxide layer;

removing the barrier layer of tantalum and seed layer from unused areas of the oxide layer, leaving a seed area; and

depositing a conductor on the seed area after removing the barrier layer of tantalum and seed layer from unused areas of the oxide layer.

13. (Previously Presented) The method of claim 12, wherein depositing a barrier layer of tantalum on the oxide layer comprises:

depositing the barrier layer of tantalum to a depth of between fifty angstroms and one-thousand angstroms.

14. (Original) The method of claim 12, wherein depositing the barrier layer of tantalum and gold on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

15. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer of tantalum on the oxide layer;

depositing a seed layer of gold on the oxide layer;

removing the barrier layer of tantalum and seed layer from selected areas of the oxide layer, leaving a seed area; and

depositing gold on the seed area after removing the barrier layer of tantalum and seed layer from selected areas of the oxide layer.

16. (Previously Presented) The method of claim 15, wherein depositing a barrier layer of tantalum on the oxide layer comprises:

depositing the barrier layer of tantalum to a depth of between fifty angstroms and one-thousand angstroms.

17. (Previously Presented) The method of claim 15, wherein depositing the barrier layer of tantalum and gold on the oxide layer comprises:

depositing the barrier layer of tantalum by physical vapor-deposition.

18. (Original) The method of claim 15, wherein depositing gold on the seed area comprises:

depositing gold on the seed area by electroless plating.

19. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer;

depositing a seed layer of silver on the oxide layer;

removing the barrier layer and seed layer from selected areas of the oxide layer, leaving a seed area; and

depositing silver on the seed area after removing the barrier layer and seed layer from selected areas of the oxide layer.

20. (Original) The method of claim 19, wherein depositing the barrier layer of titanium and silver on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

21. (Original) The method of claim 19, wherein depositing a seed layer of titanium and silver on the oxide layer comprises:

depositing the seed layer of titanium and silver to a depth of between fifty angstroms and two-thousand angstroms.

22. (Original) The method of claim 19, wherein depositing silver on the seed area comprises:

depositing silver on the seed area by electroless plating.

23. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer;

depositing a seed layer of copper on the oxide layer;

removing the barrier layer and seed layer from selected areas or unused areas of the oxide layer, leaving a seed area; and

depositing aluminum on the seed area after removing the barrier layer and seed layer from selected areas or unused areas of the oxide layer.

24. (Original) The method of claim 23, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

25. (Original) The method of claim 23, wherein depositing the barrier layer of titanium and aluminum on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

26. (Original) The method of claim 23, wherein depositing copper on the seed area comprises:

depositing aluminum on the seed area by selective chemical vapor-deposition (CVD).

27. (Previously Presented) A method of forming a conductor comprising:

depositing a polymer layer over a planarized surface;

etching a trench on the polymer layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer;

depositing a seed layer selected from the group consisting of gold, silver, and copper on the polymer layer;

removing the barrier layer and seed layer from selected areas of the polymer layer, leaving a seed area; and

depositing a conductor on the seed area after removing the barrier layer and seed layer from selected areas of the polymer layer.

28. (Original) The method of claim 27, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

29. (Original) The method of claim 27, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer comprises:

depositing the barrier layer by physical vapor-deposition.

30. (Previously Presented) A method of forming a conductor comprising:

depositing a polymer layer over a planarized surface;

etching a trench on the polymer layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer;

depositing a seed layer of gold on the polymer layer;

removing the barrier layer and seed layer from selected areas or unused areas of the polymer layer, leaving a seed area; and

depositing gold on the seed area after removing the barrier layer and seed layer from selected areas or unused areas of the polymer layer.

31. (Original) The method of claim 30, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

32. (Original) The method of claim 30, wherein depositing a barrier layer selected form the group consisting of titanium, zirconium, and hafnium on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

33. (Original) The method of claim 30, wherein depositing gold on the seed area comprises:

depositing gold on the seed area by electroless plating.

34. (Previously Presented) A method of forming a conductor comprising:

depositing a polymer layer over a planarized surface;

etching a trench on the polymer layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer;

depositing a seed layer of silver on the polymer layer;

removing the barrier layer and seed layer from selected areas of the polymer layer, leaving a seed area; and

depositing silver on the seed area after removing the barrier layer and seed layer from selected areas of the polymer layer.

35. (Original) The method of claim 34, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

36. (Original) The method of claim 34, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer comprises:

depositing the barrier layer by physical vapor-deposition.

37. (Original) The method of claim 34, wherein depositing silver on the seed area comprises:

depositing silver on the seed area by electroless plating.

38. (Previously Presented) A method of forming a conductor comprising:

depositing a polymer layer over a planarized surface;

etching a trench on the polymer layer;

depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer;

depositing a seed layer of copper on the polymer layer;

removing the barrier layer and seed layer from unused areas of the polymer layer, leaving a seed area; and

depositing copper on the seed area after removing the barrier layer and seed layer from unused areas of the polymer layer.

39. (Original) The method of claim 38, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

40. (Original) The method of claim 38, wherein depositing a barrier layer selected from the group consisting of titanium, zirconium, and hafnium on the polymer layer comprises:

depositing the barrier layer by physical vapor-deposition.

41. (Original) The method of claim 38, wherein depositing copper on the seed area comprises:

depositing copper on the seed area by electroless plating.

42. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer selected from the group consisting of zirconium and titanium on the oxide layer;

depositing a seed layer of aluminum-copper on the oxide layer;

removing the barrier layer and seed layer from selected areas of the oxide layer, leaving a seed area; and

depositing a conductor on the seed area after removing the barrier layer and seed layer from selected areas of the oxide layer.

43. (Original) The method of claim 42, wherein depositing a barrier layer selected from the group consisting of zirconium and titanium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

44. (Original) The method of claim 42, wherein depositing the barrier layer selected from the group consisting of zirconium and titanium on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

45. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer of zirconium on the oxide layer;

depositing a seed layer of aluminum-copper on the oxide layer;

removing the barrier layer and seed layer from selected areas of the oxide layer, leaving a seed area; and

depositing aluminum on the seed area after removing the barrier layer and seed layer from selected areas of the oxide layer.

46. (Original) The method of claim 45, wherein depositing a barrier layer of zirconium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

47. (Original) The method of claim 45, wherein depositing a barrier layer of zirconium on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

48. (Original) The method of claim 45, wherein depositing aluminum on the seed area comprises:

depositing aluminum on the seed area by chemical vapor-deposition.

49. (Original) The method of claim 45, wherein depositing aluminum on the seed area comprises:

depositing an amount of aluminum sufficient to fill the trench.

50. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench on the oxide layer;

depositing a barrier layer of titanium on the oxide layer;

depositing a seed layer of aluminum-copper on the barrier layer;

removing the barrier layer and seed layer from selected areas or unused areas of the oxide layer, leaving a seed area; and

depositing aluminum on the seed area after removing the barrier layer and seed layer from selected areas of the oxide layer.

51. (Original) The method of claim 50, wherein depositing a barrier layer of titanium on the oxide layer comprises:

depositing the barrier layer to a depth of between fifty angstroms and one-thousand angstroms.

52. (Original) The method of claim 50, wherein depositing a barrier layer of titanium on the oxide layer comprises:

depositing the barrier layer by physical vapor-deposition.

53. (Original) The method of claim 50, wherein depositing aluminum on the seed area comprises:

depositing aluminum on the seed area by chemical vapor-deposition.

54. (Previously Presented) The method of claim 50, wherein depositing a seed layer of aluminum-copper on the barrier layer comprises:

depositing the seed layer of aluminum-copper on the barrier layer by chemical vapor-deposition.

55. (Original) The method of claim 50, wherein depositing aluminum on the seed area comprises:

depositing an amount of aluminum sufficient to fill the trench.

56. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench having a top on the oxide layer;

depositing a barrier layer of tantalum nitride on the oxide layer;

depositing a seed layer of copper directly on the barrier layer of tantalum nitride without a layer between the seed layer of copper and the barrier layer of tantalum nitride;

removing the barrier layer and seed layer from selected areas of the oxide layer;

depositing a conductor on the seed area leaving a seed area; and

depositing a layer of tantalum nitride above the conductor after removing the barrier layer and seed layer from selected areas of the oxide layer.

57. (Original) The method of claim 56, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing approximately one-hundred angstroms of tantalum nitride.

58. (Original) The method of claim 56, wherein depositing a seed layer of copper on the tantalum nitride layer comprises:

depositing approximately five-hundred angstroms of copper on the tantalum nitride layer.

59. (Original) The method of claim 56, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride by a non-anisotropic deposition technique.

60. (Original) The method of claim 56, wherein depositing a seed layer of copper on the barrier layer of tantalum nitride comprises:

depositing the seed layer of copper on the tantalum nitride layer by a non-anisotropic deposition technique.

61. (Original) The method of claim 56, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride to a depth of between fifty angstroms and one-thousand angstroms.

62. (Original) The method of claim 56, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride on the oxide layer by chemical vapor-deposition.

63. (Original) The method of claim 56, wherein depositing a seed layer of copper on the layer of tantalum nitride comprises:

depositing the seed layer copper on the barrier layer to a depth of approximately five-hundred angstroms below the top of the trench.

64. (Original) The method of claim 56, wherein depositing a barrier layer of tantalum nitride above the conductor comprises:

depositing the barrier layer of tantalum nitride above the conductor to a depth of approximate five-hundred angstroms.

65. (Original) The method of claim 56, wherein depositing an oxide layer over a planarized surface comprises:

depositing a silicon dioxide layer over the planarized surface.

66. (Original) The method of claim 56, wherein depositing an oxide layer over a planarized surface comprises:

depositing a fluorinated silicon oxide layer over the planarized surface.

67. (Previously Presented) A method of forming a conductor comprising:

depositing an oxide layer over a planarized surface;

etching a trench having a top on the oxide layer;

depositing a barrier layer of tantalum nitride on the oxide layer;

depositing a seed layer of copper on the barrier layer of tantalum nitride;

depositing a seed layer of copper directly on the barrier layer of tantalum nitride without a layer between the seed layer of copper and the barrier layer of tantalum nitride;

removing the barrier layer and seed layer from selected areas of the oxide layer, leaving a seed area;

depositing a layer of copper on the seed area after removing the barrier layer and seed layer from selected areas of the oxide layer; and

depositing a layer of tantalum nitride above the layer of copper.

68. (Original) The method of claim 67, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing approximately one-hundred angstroms of tantalum nitride.

69. (Original) The method of claim 67, wherein depositing a seed layer of copper on the oxide layer comprises:

depositing approximately five-hundred angstroms of copper on the oxide layer.

70. (Original) The method of claim 67, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride by a non-anisotropic deposition technique.

71. (Original) The method of claim 67, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride to a depth of between fifty angstroms and one-thousand angstroms.

72. (Original) The method of claim 67, wherein depositing a barrier layer of tantalum nitride on the oxide layer comprises:

depositing the barrier layer of tantalum nitride on the oxide layer by chemical vapor-deposition.

73. (Original) The method of claim 67, wherein depositing a layer of copper on the seed area comprises:

depositing the layer of copper on the seed area by chemical vapor-deposition.

74. (Original) The method of claim 67, wherein depositing a layer of copper on the seed area comprises:

depositing the layer of copper on the seed area to a depth of approximately five-hundred angstroms below the top of the trench.

75. (Original) The method of claim 67, wherein depositing a layer of tantalum nitride above the copper comprises:

depositing the layer of tantalum nitride above the copper to a depth of approximate five-hundred angstroms.

76. (Original) The method of claim 67, wherein depositing an oxide layer over a planarized surface comprises:

depositing a silicon dioxide layer over the planarized surface.

77. (Original) The method of claim 67, wherein depositing an oxide layer over a planarized surface comprises:

depositing a fluorinated silicon oxide layer over the planarized surface.

78. - 185. (Canceled)

186. (Previously Presented) A method comprising:

depositing an insulator layer over a substrate having at least one device;

depositing a diffusion barrier layer over the insulator layer;

planarizing a surface of the diffusion barrier layer;

depositing a different insulator layer over the planarized surface of the diffusion barrier layer;

fabricating a connector in the different insulator layer, wherein fabricating the connector in the different insulator layer includes,

etching a trench having a depth on the different insulator layer;

depositing a barrier layer on the different insulator layer;

depositing a seed layer on the barrier layer;

removing the barrier layer and seed layer from selected areas of the different insulator layer, leaving a seed area; and

depositing a conductor on the seed area of the connector by a selective deposition process after removing the barrier layer and seed layer from selected areas of the different insulator layer.

187. (Previously Presented) The method of claim 186 wherein depositing the seed layer on the barrier layer includes depositing the seed layer selected from the group consisting of gold, silver, and copper on the barrier layer.

188. (Previously Presented) The method of claim 186, wherein depositing the barrier layer on the different insulator layer includes depositing the barrier layer on the different insulator layer by physical vapor-deposition.

189. (Previously Presented) The method of claim 186, wherein depositing the different insulator layer over the planarized surface of the diffusion barrier layer includes depositing an oxide layer over the planarized surface of the diffusion barrier layer.